

Department of Energy

§ 429.71

water heaters that differ only in fuel type or power input, ratings for untested basic models may be established in accordance with the following procedures in lieu of testing. This method allows only for the use of ratings identical to those of a tested basic model as provided below; simulations or other modeling predictions for ratings of the uniform energy factor, volume, first-hour rating, or maximum gallons per minute (GPM) are not permitted.

(1) *Gas Water Heaters.* For untested basic models of gas-fired water heaters that differ from tested basic models only in whether the basic models use natural gas or propane gas, the represented value of uniform energy factor, first-hour rating, and maximum gallons per minute for an untested basic model is the same as that for a tested basic model, as long as the input ratings of the tested and untested models are within $\pm 10\%$, that is:

$$\frac{|\text{input rating of untested basic model} - \text{input rating of tested basic model}|}{\text{input rating of tested basic model}} \leq 10\%.$$

(2) *Electric Storage Water Heaters.* Rate an untested basic model of an electric storage type water heater using the first-hour rating and the uniform energy factor obtained from a tested basic model as a basis for ratings of basic models with other input ratings, provided that certain conditions are met:

(i) For an untested basic model, the represented value of the first-hour rating and the uniform energy factor is the same as that of a tested basic model, provided that each heating element of the untested basic model is rated at or above the input rating for the corresponding heating element of the tested basic model.

(ii) For an untested basic model having any heating element with an input rating that is lower than that of the corresponding heating element in the tested basic model, the represented value of the first-hour rating and the uniform energy factor is the same as that of a tested basic model, provided that the first-hour rating for the untested basic model results in the same draw pattern specified in Table I of appendix E for the simulated-use test as was applied to the tested basic model. To establish whether this condition is met, determine the first-hour ratings for the tested and the untested basic models in accordance with the procedure described in section 5.3.3 of 10 CFR part 430, subpart B, appendix E, then compare the appropriate draw pattern specified in Table I of appendix E for the first-hour rating of the tested basic model with that for the untested basic

model. If this condition is not met, then the untested basic model must be tested and the appropriate sampling provisions applied to determine its uniform energy factor in accordance with appendix E and this part.

[76 FR 12451, Mar. 7, 2011; 76 FR 24780, May 2, 2011, as amended at 78 FR 79595, Dec. 31, 2013; 79 FR 25505, May 5, 2014; 79 FR 27410, May 13, 2014; 80 FR 152, Jan. 5, 2015; 79 FR 40565, July 11, 2014]

§ 429.71 Maintenance of records.

(a) The manufacturer of any covered product or covered equipment shall establish, maintain, and retain the records of certification reports, of the underlying test data for all certification testing, and of any other testing conducted to satisfy the requirements of this part, part 430, and part 431. Any manufacturer who chooses to use an alternative method for determining energy efficiency or energy use in accordance with § 429.70 must retain the records required by that section, any other records of any testing performed to support the use of the alternative method, and any certifications required by that section, on file for review by DOE for two years following the discontinuance of all models or combinations whose ratings were based on the alternative method.

(b) Such records shall be organized and indexed in a fashion that makes them readily accessible for review by DOE upon request.

(c) The records shall be retained by the manufacturer for a period of two

§ 429.72

years from the date that the manufacturer or third party submitter has notified DOE that the model has been discontinued in commerce.

§ 429.72 Alternative methods for determining non-energy ratings.

(a) *General.* Where § 429.14 through § 429.54 authorize the use of an alternative method for determining a physical or operating characteristic other than the energy consumption or efficiency, such characteristics must be determined either by testing in accordance with the applicable test procedure and applying the specified sampling plan provisions established in those sections or as described in the appropriate product-specific paragraph below. In all cases, the computer-aided design (CAD) models, measurements, and calculations used to determine the rating for the physical or operating characteristic shall be retained as part of the test records underlying the certification of the basic model in accordance with § 429.71.

(b) *Testing.* [Reserved]

(c) *Residential refrigerators, refrigerator-freezers, and freezers.* The total refrigerated volume of a basic model of refrigerator, refrigerator-freezer, or freezer may be determined by performing a calculation of the volume based upon computer-aided design (CAD) models of the basic model in lieu of physical measurements of a production unit of the basic model. Any value of total refrigerated volume of a basic model reported to DOE in a certification of compliance in accordance with § 429.14(b)(2) must be calculated using the CAD-derived volume(s) and the applicable provisions in the test procedures in 10 CFR part 430 for measuring volume, and must be within two percent, or 0.5 cubic feet (0.2 cubic feet for compact products), whichever is greater, of the volume of a production unit of the basic model measured in accordance with the applicable test procedure in 10 CFR part 430.

[79 FR 22348, Apr. 21, 2014]

10 CFR Ch. II (1–16 Edition)

APPENDIX A TO SUBPART B OF PART 429—STUDENT’S T-DISTRIBUTION VALUES FOR CERTIFICATION TESTING

FIGURE 1—T-DISTRIBUTION VALUES FOR CERTIFICATION TESTING
[One-Sided]

Degrees of freedom (from Appendix A)	Confidence Interval			
	90%	95%	97.5%	99%
1	3.078	6.314	12.71	31.82
2	1.886	2.920	4.303	6.965
3	1.638	2.353	3.182	4.541
4	1.533	2.132	2.776	3.747
5	1.476	2.015	2.571	3.365
6	1.440	1.943	2.447	3.143
7	1.415	1.895	2.365	2.998
8	1.397	1.860	2.306	2.896
9	1.383	1.833	2.262	2.821
10	1.372	1.812	2.228	2.764
11	1.363	1.796	2.201	2.718
12	1.356	1.782	2.179	2.681
13	1.350	1.771	2.160	2.650
14	1.345	1.761	2.145	2.624
15	1.341	1.753	2.131	2.602
16	1.337	1.746	2.120	2.583
17	1.333	1.740	2.110	2.567
18	1.330	1.734	2.101	2.552
19	1.328	1.729	2.093	2.539
20	1.325	1.725	2.086	2.528

[76 FR 12451, Mar. 7, 2011; 76 FR 24780, May 2, 2011]

Subpart C—Enforcement

§ 429.100 Purpose and scope.

This subpart describes the enforcement authority of DOE to ensure compliance with the conservation standards and regulations.

§ 429.102 Prohibited acts subjecting persons to enforcement action.

(a) Each of the following actions is prohibited:

(1) Failure of a manufacturer to provide, maintain, permit access to, or copying of records required to be supplied under the Act and this part or failure to make reports or provide other information required to be supplied under the Act and this part, including but not limited to failure to properly certify covered products and covered equipment in accordance with § 429.12 and §§ 429.14 through 429.54;

(2) Failure to test any covered product or covered equipment subject to an applicable energy conservation standard in conformance with the applicable